

ABSTRACT OF THE DISCLOSURE

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A thermoplastic polymer blend of a bi-continuous phase structure contains thermoplastic starch, at least one synthetic polymer, and a hydrolysis component on PVAc basis. The starch component of the polymer blend has a molecular weight which is only minimally reduced relative to native starch. The thermoplastic polymer blend is produced by reactive extrusion of a mixture of native starch and at least one hydrophobic polymer with addition of a hydrolyzed component on polyvinyl acetate basis and of lower polyfunctional alcohols and water in the presence of an acidic catalyst. The thermoplastic polymer blend is used for producing injection molded, deep-drawn, or blow-molded parts, foils or raw materials for fibers as well as material for melt film coatings.